

Harvey County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

5/24/2016

Using the most recent IMPLAN data available (2014) adjusted for 2016, 24 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Harvey County economy.¹

These 24 sectors have a total direct output of approximately **\$1.3 billion** and support **2,933.2 jobs** in Harvey County. Running the model for all 24 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	2,933.2	11.40%	\$296,963,340.99	19.78%	\$1,264,046,220.54	84.19%
Indirect Effect	1,195.9	4.65%	\$66,810,037.02	4.45%	\$134,893,928.91	8.98%
Induced Effect	1,021.8	3.97%	\$55,226,359.00	3.68%	\$103,953,318.89	6.92%
Total Effect	5,150.9	20.03%	\$418,999,737.02	27.91%	\$1,502,893,468.34	100.10%

As shown in the above table, agriculture, food, and food processing sectors support **5,150.9 jobs**, or **20.03%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$1.5 billion**, roughly **100.1% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 24 agriculture, food, and food processing sectors is approximately **\$419 million**, or **27.91% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **27.91% of the total economy**.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the farm machinery and equipment manufacturing sector is the top employer with **1,610.1 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Harvey County.

Top Ten Sectors by Employment		
Sector	Total Employment	Total Output
Farm machinery and equipment manufacturing	1610.1	\$988,399,619.66
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	517.7	\$60,752,948.63
Landscape and horticultural services	230.3	\$6,453,779.55
Real estate	186.2	\$16,103,209.63
Grain farming	154.5	\$60,125,265.31
Wholesale trade	123.0	\$24,834,164.02
Securities and commodity contracts intermediation and brokerage	109.4	\$7,956,169.28
Marketing research and all other miscellaneous professional, scientific, and technical services	99.2	\$5,006,564.92
Limited-service restaurants	88.2	\$6,781,755.02
Retail - Motor vehicle and parts dealers	79.1	\$8,377,643.43

The farm machinery and equipment manufacturing sector directly contributes approximately **\$988.4 million** to the Harvey County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Sectors by Output		
Sector	Total Employment	Total Output
Farm machinery and equipment manufacturing	1610.1	\$988,399,619.66
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	517.7	\$60,752,948.63
Grain farming	154.5	\$60,125,265.31
Flour milling	27.3	\$42,412,573.85
Oilseed farming	23.4	\$28,552,466.43
Wholesale trade	123.0	\$24,834,164.02
Lawn and garden equipment manufacturing	40.2	\$21,465,008.85
Owner-occupied dwellings	0.0	\$19,409,126.45
Fertilizer mixing	24.8	\$18,066,778.55
Real estate	186.2	\$16,103,209.63

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Harvey County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	23.4	\$28,552,466.43
Grain farming	154.5	\$60,125,265.31
Vegetable and melon farming	1.6	\$418,482.02
Fruit farming	1.1	\$128,676.26
Tree nut farming	0.0	\$3,234.54
Greenhouse, nursery, and floriculture production	3.1	\$599,717.46
Cotton farming	3.0	\$849,154.92
All other crop farming	34.3	\$2,824,182.37
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	517.7	\$60,752,948.63
Dairy cattle and milk production	11.6	\$5,210,282.79
Poultry and egg production	1.5	\$1,351,915.60
Animal production, except cattle and poultry and eggs	51.6	\$6,114,153.37
Commercial logging	15.6	\$1,614,934.62
Commercial hunting and trapping	67.5	\$2,441,270.31
Flour milling	27.3	\$42,412,573.85
Animal, except poultry, slaughtering	9.0	\$5,460,837.49
Bread and bakery product, except frozen, manufacturing	33.4	\$4,366,833.99
Frozen cakes and other pastries manufacturing	1.7	\$256,744.79
Fertilizer mixing	24.8	\$18,066,778.55
Farm machinery and equipment manufacturing	1610.1	\$988,399,619.66
Lawn and garden equipment manufacturing	40.2	\$21,465,008.85
All other industrial machinery manufacturing	4.5	\$1,004,087.15
Veterinary services	65.8	\$5,467,601.61
Landscape and horticultural services	230.3	\$6,453,779.55

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Harvey County, the retail sector was omitted.